

**Communication Support Team (CST) Emergency Response  
Vehicle  
Statement of Work**

## **1.0 INTRODUCTION**

The Federal Aviation Administration's C3 program office, also known as the Emergency Operations and Communications Division (AEO-400) has the responsibility to provide reliable communications support to the Federal Aviation Administration, Department of Transportation, and other government agencies during national security events, disaster recovery efforts, accident investigations, government exercises, and special invitational events. To continue supporting our mission, the C3 program office requires the purchase of a new CST emergency response vehicle.

## **2.0 OBJECTIVES**

The objective of this work is to build a customized and outfitted CST vehicle to meet the FAA's specific needs. This statement of work will allow the C3 Program Office to accomplish this objective.

## **3.0 REQUIREMENTS**

The Contractor shall provide a customized emergency response vehicle that meets or exceeds the following requirements:

All parts utilized in this unit shall be new and compatible with the other parts and items utilized on the vehicle. The parts and equipment utilized shall not interfere with any other part or equipment.

All surfaces exposed to adverse seasonal conditions shall be treated with an appropriate corrosion resistant treatment.

Unless otherwise specified, contact between dissimilar metals shall be avoided wherever possible or adequately protected against electrolytic corrosion in accordance with the best industrial manufacturing processes.

All parts and equipment shall be reasonably marked for identification. This identification shall include: part name, manufacturers name, serial number, and part number.

The vehicle shall be constructed to meet the best standards of craftsmanship for custom vehicle manufacturers. Attention shall be paid to neatness and aesthetics of all welds, joints, matings, and fasteners. All surfaces shall be finished (no untreated bare metal)

The vendor shall build the vehicle using its knowledge of standards for safety, protection, and usability. All compartments shall be appropriately secured, sealed, and segregated as appropriate from other compartment. However, ease of access should be maximized. For example, the battery compartment shall be sealed and separate but should not require special tools to easily access for maintenance.

The vehicle shall be capable of operating in a variety of driving conditions including but not limited to the following:

- ◆ On-highway at highway speeds
- ◆ Off-highway on paved roads
- ◆ Mild off road use. This includes unpaved but reasonably maintained roads.
- ◆ Extreme weather fluctuations. 10 -100 Degrees F and relative humidity extremes.
- ◆ Inclines or declines of up to 27.5 degrees

Dimensions

- ◆ Overall length 28' Excluding rear mast

- ◆ Width 8' 6"
- ◆ Height 12'
- ◆ Weight must be less than 26,000 lbs GVRW

#### Chassis/Body requirements

- ◆ Approximately 206" Wheelbase
- ◆ Gas powered engine
- ◆ 20KW Gas powered generator
- ◆ 4 WD
- ◆ Auto transmission
- ◆ Chassis Tie Downs for Air/Flatbed Transportation

### 3.1 ELECTRICAL SYSTEMS

- ◆ One (1) 50 amp, 120/240 volt waterproof shore power inlet, 50-ft 50A-125/250Vac shore power cord, 50A-125/250Vac pigtail
- ◆ One (1) 20amp 120Vac shore power inlet with 25ft 20A-120Vac shore power cord
- ◆ One (1) Power Tech 20kW gas fueled generator or equivalent. The generator shall be plumbed to the main fuel cell. The generator shall be mounted in a custom fabricated compartment treated with high density sound absorbing foam or similar treatment to make cabin noise minimal. Reasonable access to the generator for servicing shall be provided via doors. Lift doors shall have gas charged lift/support cylinders. The generator compartment should be weather proofed to sufficiently protect the equipment from weather hazards.
- ◆ Minimum four (4) battery system for auxiliary power supplies. These batteries should be adequately protected from weather but also be easily accessible.
- ◆ All wiring, switches, and installed equipment specifications shall meet applicable national electric codes.
- ◆ All wiring shall be color coded and/or labeled (on min 12" centers) for easy identification and troubleshooting.
- ◆ All wiring to be full run. No splices.
- ◆ All circuits shall be appropriately rated according to intended load.
- ◆ All circuits shall be marked via label or engraving in the fuse panel box.
- ◆ Minimum of one (1) duplex wall receptacle at each individual work station.
- ◆ Minimum of Three (3) duplex receptacles to be located in the conference area.
- ◆ Install one (1) duplex receptacle in the driver/passenger area.
- ◆ Install sufficient receptacles (or other appropriate power receptacles) at the electronics/communication locations. The number shall be sufficient to power current items (at a minimum the TV, Repeater, Electronic white board, DSL service, Sat, etc) and provide for additional equipment service in the future.
- ◆ Install a minimum of four (4) external, weather resistant 20A 125 VAC exterior GFI receptacles. They should be wired in pairs and have dedicated 20A circuits.
- ◆ Install minimum of 6 scene lights on exterior of body.
- ◆ Install two (2) commercial duty 80 amp minimum power inverter. The inverter shall be wired to provide interior and communications power.
- ◆ Install one (1) 12V power outlet at each workstation.
- ◆ Install LED (or equivalent) indicators to show circuit activation.
- ◆ Install master disconnect switches appropriate in size and capacity for this system.
- ◆ All wires to be tied @ 6" intervals.
- ◆ All hanging wires shall be supported @ 6" intervals.
- ◆ A complete wire schematic shall be provided for the entire vehicle.

- ◆ Protective grommets to be used at all appropriate locations to protect the integrity of the wires. (Eg: when wire passes through sheet metal, structural supports, or bulkheads.
- ◆ Wires shall be protected by convoluted polyethylene (or equivalent) tubing.
- ◆ Install surge suppression for entire 120V system.
- ◆ 80A 120/240Vac control panel with generator and shore power main breaker, twelve (12) UL listed magnetic/hydraulic branch circuit breakers with LED indicators, digital voltmeter, digital frequency meter, digital ammeter, generator stop/start switch, generator hour meter, shore power reverse polarity indicator and 3-position rotary transfer switch
- ◆ 120Vac auxiliary control panels as required with UL listed circuit breakers and LED indicators
- ◆ Supplemental direct ground protection of the 120-volt electrical system

### **3.2 ELECTRONICS/EQUIPMENT:**

- ◆ One (1) installed GPS street pilot (or equivalent) system
- ◆ One (1) Satellite system to include: 1.2m dish, 16W Ku Band BUC, Antenna controller, Ku LNBs iDirect compatible, 5100 series iDirect Satellite Router
- ◆ Integrated phone system with phone jacks at the following locations:
  - One (1) at each workstation
  - Two (2) at fax machine location
  - Three (3) in the conference area
  - Three (3) in exterior weatherproof box
- ◆ Eight (8) incoming land line capability.
- ◆ Cellular interface capability with the installed phone system
- ◆ Ten (10) RJ-45 CAT6 computer network jack to the following locations:
  - One (1) each at each workstation
  - One (1) at printer location
  - Three (3) in conference area
  - Four (4) in exterior weatherproof box
- ◆ Quartet Portable IdeaShare installed on dry-erase board
- ◆ Alarm system, magnetic contacts on all entry doors, exterior storage, compartment doors, battery box doors, generator compartment doors and hood. Two (2) key fobs, key pad, 360 degree ceiling mounted motion sensors, siren and bell
- ◆ Two (2) network synchronized clocks
- ◆ One (1) 40U 19" x 26.5" electronics equipment rack
- ◆ One (1) 24U 19" x 26.5" electronics equipment rack
- ◆ Four (4) Flat panel LCD television monitors
- ◆ One (1) Progressive Scan DVD/VCR recorder and player combo
- ◆ In all installations, care should be taken to facilitate future replacements, upgrades, or other system changes. Wiring, interfaces, plugs, connections, and access in general should be made to be as uncomplicated as possible.

### **3.3 INTERIOR REQUIREMENTS**

- ◆ Two (2) separate work areas. One being the main compartment (towards the driver area) with 2 workstations. Rear area to have dual use as a conference room and workstations and support a minimum of four (4) people
- ◆ The two main work areas are to be separated by a sound absorbing pocket door.
- ◆ Install electric heat to maintain 72 deg in 0 deg weather. Separate controls for front and rear of vehicle.
- ◆ Install air conditioning sufficient to provide uniform cooling throughout the cabin with up to 12 people in 90 deg weather. At a minimum, the cooling capacity should be equivalent of three (3) Coleman 13k BTU low profile air conditioning units.

- ◆ Install 2 dry chemical fire extinguishers.
- ◆ Each window shall be tinted.
- ◆ Black out curtains for all windows, custom fit, heavy duty fabric.
- ◆ Vehicle height sticker in driver compartment
- ◆ Install one (1) 9V smoke alarm.
- ◆ Install sufficient fluorescent lighting for the interior of the vehicle. There should be at least four (4) control switches to control the amount of actual lights turned on/off. Lights should be blue/white fluorescent lights.
- ◆ Individual lights should be installed at each workstation under the cabinets.
- ◆ Exposed or accessible cableways
- ◆ White Board(s)
- ◆ Printer
- ◆ Secure Fax/Phone (GFE)
- ◆ Storage, Fixed overhead cabinets / Tie down area
- ◆ Install a safe (GFE) with the following dimensions:
  - 1 drawer
  - 84 lbs.
  - 12 ½" High
  - 15 ½" Wide
  - 17 ¼" Deep
- ◆ Ability to obscure through blinds, shades, or other mechanism all exterior windows in the workplace of the van.

### **3.4 ROOF TOP EQUIPMENT**

- ◆ Rooftop capable of supporting 300 lbs
- ◆ Ku Band Satellite
- ◆ (2) MSAT (GFE)
- ◆ VHF Antenna Array
- ◆ 25' locking mast
- ◆ Satellite Based Internet
- ◆ Direct TV
- ◆ (2) BGAN satellite antennas (GFE)

### **3.5 EXTERIOR REQUIREMENTS**

- ◆ Scene Lighting
- ◆ Awning with screened room
- ◆ Exterior workspace
- ◆ Storage
- ◆ Vehicle Leveling System
- ◆ Phone / Ethernet / Power connections

### **3.6 GRAPHICS**

- ◆ Install one (1) 4 inch wide reflective stripe on the exterior (back and sides) of the vehicle. It is to be placed 48" above the ground level.
- ◆ Install custom non reflective graphics per department specifications. Includes up to seventy (70) 8"-10" letters and forty-five (45) 3"-6" letters. All lettering to be shaded or outlined.
- ◆ Install custom FAA logos (FAA supplied artwork).

### **3.7 SUPPORT**

- ◆ 3 year bumper to bumper warranty or as negotiated.
- ◆ After-manufacturer installed options (satellite system, Garmin GPS, televisions, phone system, etc) shall be covered by a minimum two (2) year warranty. A portion of this may be part of the manufacturer warranty.
- ◆ Separately priced - Minimum 2 year service agreement with quarterly servicing.
- ◆ Detailed list of recommended maintenance schedule
- ◆ Detailed list of authorized service representatives for all equipment in and on the vehicle. These representatives should be located in the Washington, DC metro (50 mile radius) area if possible.
- ◆ Detailed schematics of all systems including but not limited to the following:
  - Electrical, drive train, HVAC, equipment location, floor plan, external specifications, internal specifications, parts list.

#### 4.0 DELIVERABLES

A final design plan shall be submitted to the Government for review prior to proceeding with the build. The Contractor shall provide drawings as part of the design plans.

The Contractor must reference the "Contract Number," the "SOW Section," and the "Description" for any correspondence, information, label and/or title that designates a deliverable.

Any and all correspondence being submitted to the Contracting Officer, including copies of all correspondence transmitting required documentation to the Technical Officer, must be addressed as follows:

Federal Aviation Administration  
 Robert Corcoran  
 300 D Street, SW  
 AEO-400, Room 823  
 Washington, DC 20024

The Communication Support Team (CST) emergency response vehicle (final product) shall be delivered to:

Penn Shop Tower  
 Damascus, Maryland  
 FAA Tower #1208357

In addition, all items required to be delivered hereunder must be prepared in accordance with the terms and conditions of this Contract and must be delivered **F.O.B. Destination**.

#### 4.1 DELIVERY INCENTIVE SCHEDULE

Performance bonuses will be offered for early delivery in accordance with the following schedule:

<b>Delivered By</b>	<b>Performance Bonus</b>
On or Before July 15, 2009	10% of Contract Price
July 16, 2009 – July 22, 2009	8.5% of Contract Price
July 23, 2009 – July 29, 2009	7% of Contract Price
July 30, 2009 – August 5, 2009	5.5% of Contract Price
August 6, 2009 – August 12, 2009	4% of Contract Price

August 13, 2009 – August 19, 2009	2.5% of Contract Price
On or After August 20, 2009	No Performance Bonus

#### **5.0 PROGRESS/COMPLIANCE**

The Contractor shall provide all deliverables in hard copy and soft copy to the Government.

#### **6.0 PERIOD OF PERFORMANCE**

The period of performance shall be one (1) year from the date of award.

#### **7.0 SUPPLIES/SERVICES TO BE RENDERED AND PRICES**

Please provide a fixed-price quote for the completion of the requirements in Sections 3.0 through 3.7.